

JAN 12 2001

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A003.txt

JAN 31 2001

SEQUENCE LISTING

TECH CENTER 1600/2900

<110> Chicheportiche, Yves
Browning, Jeffrey

<120> Tumor Necrosis Factor Related Ligand

<130> A003

<140> 09/245,198

<141> 1999-02-05

<150> 60/023,541

<151> 1996-08-07

<150> 60/028,515

<151> 1996-10-18

<150> 60/040,820

<151> 1997-03-18

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cttggAACAA	ctagtccggc	ctcgaagaag	tgctcctaaa	ggccggaagg	cgccggcctcg	240
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gcgcctacgac	cgccagattg	ggsaatttac	agtcatcagg	gctgggctct	actacctgta	420
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tcggatccgc	accctccct	gggctcatct	taaggctgcc	cccttcctaa	cctactttgg	660
actctttcaa	gttca	gggccttgct	ctcccagatt	ccttaaactt	tccctggctc	720
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gacgtatcct	tgctcttctt	aacatccat	cccaccacaa	ctatccac	cactagctcc	900
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A003.txt

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Gln	Glu	Glu	Leu	Thr	Ala	Glu	Asp	Arg	Arg	Glu	Pro	Pro	Glu	Leu	Asn
					35		40								45
Pro	Gln	Thr	Glu	Glu	Ser	Gln	Asp	Val	Val	Pro	Phe	Leu	Glu	Gln	Leu
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Val	Arg	Pro	Arg	Arg	Ser	Ala	Pro	Lys	Gly	Arg	Lys	Ala	Arg	Pro	Arg
	65					70			75						80
Arg	Ala	Ile	Ala	Ala	His	Tyr	Glu	Val	His	Pro	Arg	Pro	Gly	Gln	Asp
						85			90						95
Gly	Ala	Gln	Ala	Gly	Val	Asp	Gly	Thr	Val	Ser	Gly	Trp	Glu	Glu	Thr
					100			105							110
Lys	Ile	Asn	Ser	Ser	Ser	Pro	Leu	Arg	Tyr	Asp	Arg	Gln	Ile	Gly	Glu
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Phe	Thr	Val	Ile	Arg	Ala	Gly	Leu	Tyr	Tyr	Leu	Tyr	Cys	Gln	Val	His
						130	135				140				
Phe	Asp	Glu	Gly	Lys	Ala	Val	Tyr	Leu	Lys	Leu	Asp	Leu	Leu	Val	Asn
	145					150			155						160
Gly	Val	Leu	Ala	Leu	Arg	Cys	Leu	Glu	Glu	Phe	Ser	Ala	Thr	Ala	Ala
						165		170							175
Ser	Ser	Pro	Gly	Pro	Gln	Leu	Arg	Leu	Cys	Gln	Val	Ser	Gly	Leu	Leu
						180		185							190
Pro	Leu	Arg	Pro	Gly	Ser	Ser	Leu	Arg	Ile	Arg	Thr	Leu	Pro	Trp	Ala
							195	200			205				
His	Leu	Lys	Ala	Ala	Pro	Phe	Leu	Thr	Tyr	Phe	Gly	Leu	Phe	Gln	Val
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agccagaggc	ggagggggcg	ccggggggag	ccggggcacccg	ccctgctgg	cccgctcgcg	180
ctgggcctgg	gcctggcgct	ggcctgcctc	ggcctcctgc	tggccgtgg	cagtttgggg	240
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A003.txt

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tacaaccgcc	agatcgggga	gtttatagtc	acccgggtg	ggctctacta	cctgtactgt	600
caggtgcact	ttgatgaggg	gaaggctgtc	tacctgaagc	tggacttgct	ggtggatggt	660
gtgctggccc	tgcgctgcct	ggaggaattc	tcagccactg	cggccagttc	cctcgggccc	720
cagctccgccc	tctgccaggt	gtctggctg	ttggccctgc	ggccagggtc	ctccctgccc	780
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cgcacagctct	ctgggcaccc	ggtccccctt	gccccaccc	cagccgctct	ttgctccaga	960
cctgcccctc	cctcttagagg	ctgcctggc	ctgttacagt	gttttccatc	ccacataaaat	1020
acagtattcc	cactcttatac	ttacaactcc	cccaccggcc	actctccacc	tcactagctc	1080
cccaatccct	gaccctttga	ggccccccagt	gatctcgact	ccccccctggc	cacagacccc	1140
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gcactaagag	gggctggacc	tggcggcagg	aagccaaaga	gactgggcct	aggccaggag	1260
ttcccaaatg	tgagggcga	gaaacaagac	aagctcctcc	cttgagaatt	ccctgtggat	1320
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35 40 45
Gly Glu Pro Gly Thr Ala Leu Leu Val Pro Leu Ala Leu Gly Leu Gly
50 55 60
Leu Ala Leu Ala Cys Leu Gly Leu Leu Leu Ala Val Val Ser Leu Gly
65 70 75 80
Ser Arg Ala Ser Leu Ser Ala Gln Glu Pro Ala Gln Glu Glu Leu Val
85 90 95
Ala Glu Glu Asp Gln Asp Pro Ser Glu Leu Asn Pro Gln Thr Glu Glu
100 105 110
Ser Gln Asp Pro Ala Pro Phe Leu Asn Arg Leu Val Arg Pro Arg Arg
115 120 125
Ser Ala Pro Lys Gly Arg Lys Thr Arg Ala Arg Arg Ala Ile Ala Ala
130 135 140
His Tyr Glu Val His Pro Arg Pro Gly Gln Asp Gly Ala Gln Ala Gly
145 150 155 160
Val Asp Gly Thr Val Ser Gly Trp Glu Glu Ala Arg Ile Asn Ser Ser
165 170 175
Ser Pro Leu Arg Tyr Asn Arg Gln Ile Gly Glu Phe Ile Val Thr Arg
180 185 190
Ala Gly Leu Tyr Tyr Leu Tyr Cys Gln Val His Phe Asp Glu Gly Lys
195 200 205

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A003.txt

Ala Val Tyr Leu Lys Leu Asp Leu Leu Val Asp Gly Val Leu Ala Leu
210 215 220
Arg Cys Leu Glu Glu Phe Ser Ala Thr Ala Ala Ser Ser Leu Gly Pro
225 230 235 240
Gln Leu Arg Leu Cys Gln Val Ser Gly Leu Leu Ala Leu Arg Pro Gly
245 250 255
Ser Ser Leu Arg Ile Arg Thr Leu Pro Trp Ala His Leu Lys Ala Ala
260 265 270
Pro Phe Leu Thr Tyr Phe Gly Leu Phe Gln Val His
275 280

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A003.txt

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					20			25					30		
Leu	Ser	Leu	Phe	Ser	Phe	Leu	Ile	Val	Ala	Gly	Ala	Thr	Thr	Leu	Phe
					35			40				45			
Cys	Leu	Leu	His	Phe	Gly	Val	Ile	Gly	Pro	Gln	Arg	Glu	Glu	Phe	Pro
					50			55			60				
Arg	Asp	Leu	Ser	Leu	Ile	Ser	Ser	Pro	Leu	Ala	Gln	Ala	Val	Arg	Ser
65					70				75			80			
Ser	Ser	Arg	Thr	Pro	Ser	Asp	Lys	Pro	Val	Ala	His	Val	Val	Ala	Asn
					85				90			95			
Pro	Gln	Ala	Glu	Gly	Gln	Leu	Gln	Trp	Leu	Asn	Arg	Arg	Ala	Asn	Ala
					100				105			110			
Leu	Leu	Ala	Asn	Gly	Val	Glu	Leu	Arg	Asp	Asn	Gln	Leu	Val	Val	Pro
					115			120			125				
Ser	Glu	Gly	Leu	Ile	Tyr	Ser	Gln	Val	Leu	Phe	Gly	Gln	Gly	Cys	Pro
					130			135			140				
Ser	Thr	His	Val	Leu	Leu	Thr	His	Thr	Ile	Ser	Arg	Ile	Ala	Val	Ser
145					150				155			160			
Tyr	Gln	Thr	Lys	Val	Asn	Leu	Leu	Ser	Ala	Ile	Lys	Ser	Pro	Cys	Gln
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Arg	Glu	Thr	Pro	Glu	Gly	Ala	Glu	Ala	Lys	Pro	Trp	Tyr	Glu	Pro	Ile
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A003.txt

Tyr Leu Gly Gly Val Phe Gln Leu Glu Lys Gly Asp Arg Leu Ser Ala
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Glu Ile Asn Arg Pro Asp Tyr Leu Asp Phe Ala Glu Ser Gly Gln Val
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Tyr Phe Gly Ile Ile Ala Leu
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35 40 45
Arg Gln His Pro Lys Met His Leu Ala His Thr Leu Lys Pro Ala Ala
50 55 60
His Leu Ile Gly Asp Pro Ser Lys Gln Asn Ser Leu Leu Trp Arg Ala
65 70 75 80
Asn Thr Asp Arg Ala Phe Leu Gln Asp Gly Phe Ser Leu Ser Asn Asn
85 90 95
Ser Leu Leu Val Pro Thr Ser Gly Ile Tyr Phe Val Tyr Asn Ser Gln
100 105 110
Val Val Phe Ser Gly Lys Ala Tyr Ser Pro Lys Ala Thr Ser Ser Pro
115 120 125
Leu Tyr Leu Ala His Glu Val Gln Leu Phe Ser Ser Gln Tyr Pro Phe
130 135 140
His Val Pro Leu Leu Ser Ser Gln Lys Asn Val Tyr Pro Gly Leu Gln
145 150 155 160
Glu Pro Trp Leu His Ser Met Tyr His Gly Ala Ala Phe Gln Leu Thr
165 170 175
Gln Gly Asp Gln Leu Ser Thr His Thr Asp Gly Ile Gly Pro His Leu
180 185 190
Val Leu Ser Pro Ser Thr Val Phe Phe Gly Ala Phe Ala Leu
195 200 205

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20 25 30
Leu Leu Ala Val Pro Ile Thr Val Leu Ala Val Leu Ala Leu Val Pro

A003.txt

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65					70				75					80		
Thr	Asp	Leu	Ser	Pro	Gly	Leu	Pro	Ala	Ala	His	Leu	Ile	Gly	Ala	Pro	
					85				90					95		
Leu	Lys	Gly	Gln	Gly	Leu	Gly	Trp	Glu	Thr	Thr	Lys	Glu	Gln	Ala	Phe	
					100				105					110		
Leu	Thr	Ser	Gly	Thr	Gln	Phe	Ser	Asp	Ala	Glu	Gly	Leu	Ala	Leu	Pro	
					115			120				125				
Gln	Asp	Gly	Tyr	Leu	Tyr	Thr	Cys	Leu	Val	Gly	Tyr	Arg	Gly	Arg	Ala	
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Pro	Pro	Gly	Gly	Gly	Asp	Pro	Gln	Gly	Arg	Ser	Val	Thr	Leu	Arg	Ser	
	145				150					155			160			
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Leu	Leu	Glu	Gly	Ala	Glu	Thr	Val	Thr	Pro	Val	Leu	Asp	Pro	Ala	Arg	
					180				185			190				
Arg	Gln	Gly	Tyr	Gly	Pro	Leu	Trp	Tyr	Thr	Ser	Val	Gly	Phe	Gly	Gly	
					195			200			205					
Leu	Val	Gln	Leu	Arg	Arg	Gly	Glu	Arg	Val	Tyr	Val	Asn	Ile	Ser	His	
					210			215			220					
Pro	Asp	Met	Val	Asp	Phe	Ala	Thr	Gly	Lys	Thr	Phe	Phe	Gly	Ala	Val	
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Met	Val	Gly														

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Pro	Gly	Gln	Arg	Arg	Pro	Leu	Pro									
					20				25				30			
Pro	Pro	Pro	Pro	Pro	Pro	Leu	Pro	Pro	Leu	Pro	Leu	Pro	Pro	Leu		
						35			40			45				
Lys	Lys	Arg	Gly	Asn	His	Ser	Thr	Gly	Leu	Cys	Leu	Leu	Val	Met	Phe	
					50			55			60					
Phe	Met	Val	Leu	Val	Val	Gly	Leu	Gly	Leu	Gly	Leu	Gly	Met	Phe	Gln	
					65			70			75			80		
Leu	Phe	His	Leu	Gln	Lys	Glu	Leu	Ala	Glu	Leu	Arg	Glu	Ser	Thr	Ser	
						85			90			95				
Gln	Met	His	Thr	Ala	Ser	Ser	Leu	Glu	Lys	Gln	Ile	Gly	His	Pro	Ser	
					100			105			110					
Pro	Pro	Pro	Glu	Lys	Lys	Glu	Leu	Phe	Lys	Val	Ala	His	Leu	Thr	Gly	
					115			120			125					
Lys	Ser	Asn	Ser	Arg	Ser	Met	Pro	Leu	Glu	Trp	Glu	Asp	Thr	Tyr	Gly	

A003.txt

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Ile Val Leu Leu Ser Gly Val Lys Tyr Lys Lys		Gly Gly Leu Val Ile
145	150	155 160
Asn Glu Thr Gly Phe Val Tyr Ser Lys Val Tyr		Phe Arg Gly Gln Ser
165	170	175
Cys Asn Asn Gln Pro Leu Ser Lys Val Tyr Met Arg		Asn Ser Lys Tyr
180	185	190
Pro Gln Asp Leu Val Met Met Gly Lys Asn Met Ser		Tyr Cys Thr Thr
195	200	205
Gly Gln Met Trp Ala Arg Ser Ser Tyr Leu Gly Ala		Val Phe Asn Leu
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225	230	235

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Val Thr Tyr Val Tyr Phe Thr Asn Glu Leu Lys Gln Met Gln Asp Lys		
35	40	45
Tyr Ser Lys Ser Gly Ile Ala Cys Phe Leu Lys Glu Asp Asp Ser Tyr		
50	55	60
Trp Asp Pro Asn Asp Glu Glu Ser Met Asn Ser Pro Cys Trp Gln Val		
65	70	75 80
Lys Trp Gln Val Lys Trp Gln Leu Arg Gln Leu Val Arg Lys Met Ile		
85	90	95
Leu Arg Thr Ser Glu Glu Thr Ile Ser Thr Val Gln Glu Lys Gln Gln		
100	105	110
Asn Ile Ser Pro Leu Val Arg Glu Arg Gly Pro Gln Arg Val Ala Ala		
115	120	125
His Ile Thr Gly Thr Arg Gly Arg Ser Asn Thr Leu Ser Ser Pro Asn		
130	135	140
Ser Lys Asn Glu Lys Ala Leu Gly Arg Lys Ile Asn Ser Trp Glu Ser		
145	150	155 160
Ser Arg Ser Gly His Ser Phe Leu Ser Asn Leu His Leu Arg Asn Gly		
165	170	175
Glu Leu Val Ile His Glu Lys Gly Phe Tyr Tyr Ile Tyr Ser Gln Thr		
180	185	190
Tyr Phe Arg Phe Gln Glu Glu Ile Lys Glu Asn Thr Lys Asn Asp Lys		
195	200	205
Gln Met Val Val Tyr Ile Tyr Lys Tyr Thr Ser Tyr Pro Asp Pro Ile		
210	215	220
Leu Leu Met Lys Ser Ala Arg Asn Ser Cys Trp Ser Lys Asp Ala Glu		
225	230	235 240
Tyr Gly Ser Ile Tyr Gln Gly Gly Ile Phe Glu Leu Lys Glu Asn Asp		

A003.txt

	245	250	255												
Arg	Ile	Phe	Val	Ser	Val	Thr	Asn	Glu	His	Leu	Ile	Asp	Met	Asp	His
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Glu	Ala	Ser	Phe	Phe	Gly	Ala	Phe	Leu	Val	Gly					
	275						280								

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<400> 24

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Cys	Val	Leu	Arg	Ala	Ala	Leu	Val	Pro	Leu	Val	Ala	Gly	Leu	Val	Ile
			20					25					30		
Cys	Leu	Val	Val	Cys	Ile	Gln	Arg	Phe	Ala	Gln	Ala	Gln	Gln	Gln	Leu
			35			40						45			
Pro	Leu	Glu	Ser	Leu	Gly	Trp	Asp	Val	Ala	Glu	Leu	Gln	Leu	Asn	His
	50					55					60				
Thr	Gly	Pro	Gln	Gln	Asp	Pro	Arg	Leu	Tyr	Trp	Gln	Gly	Gly	Pro	Ala
	65					70			75					80	
Leu	Gly	Arg	Ser	Phe	Leu	His	Gly	Pro	Glu	Leu	Asp	Lys	Gly	Gln	Leu
					85				90				95		
Arg	Ile	His	Arg	Asp	Gly	Ile	Tyr	Met	Val	His	Ile	Gln	Val	Thr	Leu
						100			105				110		
Ala	Ile	Cys	Ser	Ser	Thr	Thr	Ala	Ser	Arg	His	His	Pro	Thr	Thr	Leu
						115			120			125			
Ala	Val	Gly	Ile	Cys	Ser	Pro	Ala	Ser	Arg	Ser	Ile	Ser	Leu	Leu	Arg
	130					135					140				
Leu	Ser	Phe	His	Gln	Gly	Cys	Thr	Ile	Val	Ser	Gln	Arg	Leu	Thr	Pro
	145					150					155			160	
Leu	Arg	Asp	Thr	Leu	Cys	Thr	Asn	Leu	Thr	Gly	Thr	Leu	Leu	Pro	Ser
						165				170			175		
Arg	Asn	Thr	Asp	Glu	Thr	Phe	Phe	Gly	Val	Gln	Trp	Val	Arg	Pro	
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Met	Asp	Pro	Gly	Leu	Gln	Gln	Ala	Leu	Asn	Gly	Met	Ala	Pro	Pro	Gly
1			5				10				15				
Asp	Thr	Ala	Met	His	Val	Pro	Ala	Gly	Ser	Val	Ala	Ser	His	Leu	Gly
				20				25					30		
Thr	Thr	Ser	Arg	Ser	Tyr	Phe	Tyr	Leu	Thr	Thr	Ala	Thr	Leu	Ala	Leu
						35		40				45			
Cys	Leu	Val	Phe	Thr	Val	Ala	Thr	Ile	Met	Val	Leu	Val	Val	Gln	Arg
						50		55			60				

A003.txt

Thr Asp Ser Ile Pro Asn Ser Pro Asp Asn Val Pro Leu Lys Gly Gly
65 70 75 80
Asn Cys Ser Glu Asp Leu Leu Cys Ile Leu Lys Arg Ala Pro Phe Lys
85 90 95
Ser Trp Ala Tyr Leu Gln Val Ala Lys His Leu Asn Lys Thr Lys Leu
100 105 110
Ser Trp Asn Lys Asp Gly Ile Leu His Gly Val Arg Tyr Gln Asp Gly
115 120 125
Asn Leu Val Ile Gln Phe Pro Gly Phe Ile Ile Cys Gln Leu Gln Phe
130 135 140
Leu Val Gln Cys Pro Asn Asn Ser Val Asp Leu Lys Leu Glu Leu Leu
145 150 155 160
Ile Asn Lys His Ile Lys Lys Gln Ala Leu Val Thr Val Cys Glu Ser
165 170 175
Gly Met Gln Thr Lys His Val Tyr Gln Asn Leu Ser Gln Phe Leu Leu
180 185 190
Asp Tyr Leu Gln Val Asn Thr Thr Ile Ser Val Asn Val Asp Thr Phe
195 200 205
Gln Tyr Ile Asp Thr Ser Thr Phe Pro Leu Glu Asn Val Leu Ser Ile
210 215 220
Phe Lys Asn Ser Asp
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<212> PRT
<213> homo sapien

<400> 26

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Leu Pro Ile Ser Met Lys Ile Phe Met Tyr Leu Leu Thr Val Phe Leu
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Ile Thr Met Ile Gly Ser Ala Leu Phe Ala Val Tyr Leu His Arg Arg
35 40 45
Leu Asp Lys Ile Glu Asp Glu Arg Asn Leu His Glu Asp Phe Val Phe
50 55 60
Met Lys Thr Ile Gln Arg Cys Asn Thr Gly Glu Arg Ser Leu Ser Leu
65 70 75 80
Leu Asn Cys Glu Glu Ile Lys Ser Gln Phe Glu Gly Phe Val Asp Ile
85 90 95
Met Leu Asn Lys Glu Glu Thr Lys Lys Glu Asn Ser Phe Glu Met Gln
100 105 110
Lys Gly Asp Gln Asn Pro Gln Ile Ala Ala His Val Ile Ser Glu Ala
115 120 125
Ser Ser Lys Thr Thr Ser Val Leu Gln Trp Ala Glu Lys Gly Tyr Tyr
130 135 140
Thr Met Ser Asn Asn Leu Val Thr Leu Glu Asn Gly Lys Gln Leu Thr
145 150 155 160
Val Lys Arg Gln Gly Tyr Ile Tyr Ala Gln Val Thr Phe Cys Ser Asn
165 170 175

A003.txt

Arg Glu Ala Ser Ser Gln Ala Pro Phe Ile Ala Ser Leu Cys Leu Lys
180 185 190
Ser Pro Gly Arg Phe Glu Arg Ile Leu Leu Arg Ala Ala Asn Thr His
195 200 205
Ser Ser Ala Lys Pro Cys Gly Gln Gln Ser Ile His Leu Gly Gly Val
210 215 220
Phe Glu Leu Gln Pro Gly Ala Ser Val Phe Val Asn Val Thr Asp Pro
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Ser Gln Val Ser His Gly Thr Gly Phe Thr Ser Phe Gly Leu Leu Lys
245 250 255
Leu

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<213> homo sapien

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Met Glu Tyr Ala Ser Asp Ala Ser Leu Asp Pro Glu Ala Pro Trp Pro
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Pro Ala Pro Arg Ala Arg Ala Cys Arg Val Leu Pro Trp Ala Leu Val
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Ala Gly Leu Leu Leu Leu Ala Ala Ala Cys Val Pro Ala Val Phe
35 40 45
Leu Ala Cys Pro Trp Ala Val Ser Gly Ala Arg Ala Ser Pro Ser Gly
50 55 60
Ser Ala Ala Ser Pro Arg Leu Arg Glu Gly Pro Glu Leu Ser Pro Asp
65 70 75 80
Asp Pro Ala Gly Leu Leu Asp Leu Arg Gln Gly Met Phe Ala Gln Leu
85 90 95
Val Ala Gln Asn Val Leu Leu Ile Asp Gly Pro Leu Ser Trp Tyr Ser
100 105 110
Asp Asp Gly Ala Gly Ser Ser Tyr Leu Ser Gln Gly Leu Arg Tyr Glu
115 120 125
Glu Asp Lys Lys Glu Leu Val Val Asp Ser Pro Gly Leu Tyr Tyr Val
130 135 140
Phe Leu Glu Leu Lys Leu Ser Pro Thr Phe Thr Asn Thr Gly His Lys
145 150 155 160
Val Gln Gly Trp Val Ser Leu Val Leu Gln Ala Lys Pro Gln Val Asp
165 170 175
Asp Phe Asp Asn Leu Ala Leu Thr Val Glu Leu Phe Pro Cys Ser Met
180 185 190
Glu Asn Lys Leu Val Asp Arg Ser Trp Ser Gln Leu Leu Leu Leu Lys
195 200 205
Ala Gly His Arg Leu Ser Val Gly Leu Arg Ala Tyr Leu His Gly Ala
210 215 220
Gln Asp Ala Tyr Arg Asp Trp Glu Leu Ser Tyr Pro Asn Thr Thr Ser
225 230 235 240
Phe Gly Leu Phe Leu Val Lys Pro Asp Asn Pro Trp Glu
245 250